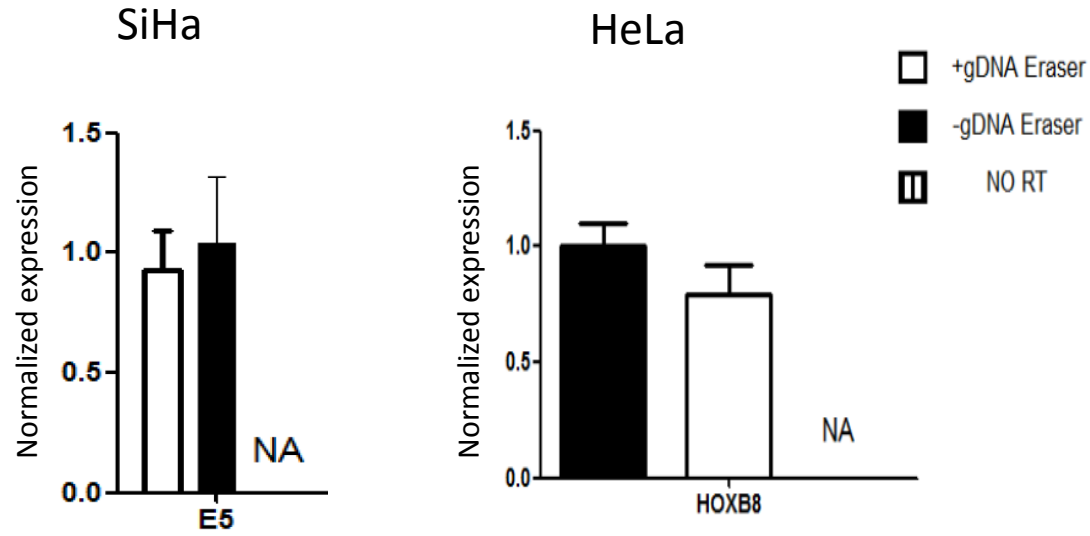


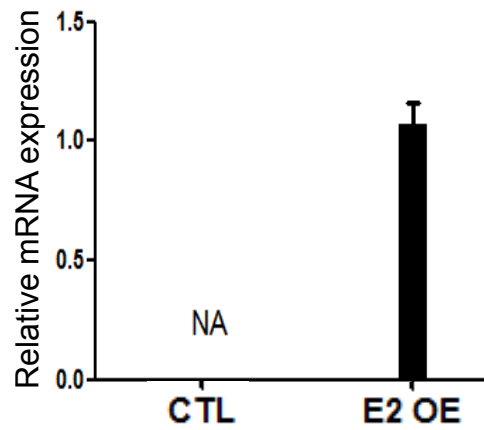
**Supplementary Data for manuscript 'HPV16 early gene E5 specifically reduces miRNA-196a in cervical cancer cells'**

Chanzhen Liu<sup>1, 2</sup>; Jianfei Lin<sup>1,3</sup>; Lianqin Li<sup>4</sup>; Yonggang Zhang<sup>1</sup>; Weiling Chen<sup>1</sup>; Zeyi Cao<sup>4</sup>; Huancong Zuo<sup>1, 4</sup>, \*Chunling Chen<sup>1,5</sup>; \*Kehkooi Kee<sup>1</sup>

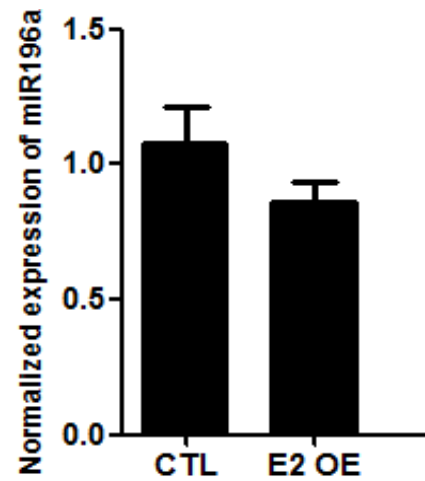
A.



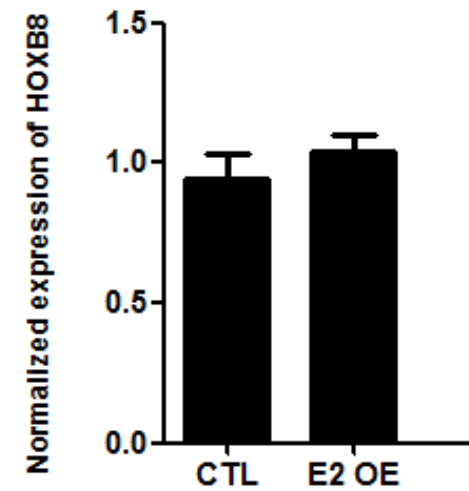
B. HPV16-E2 expression



C. miR196a expression

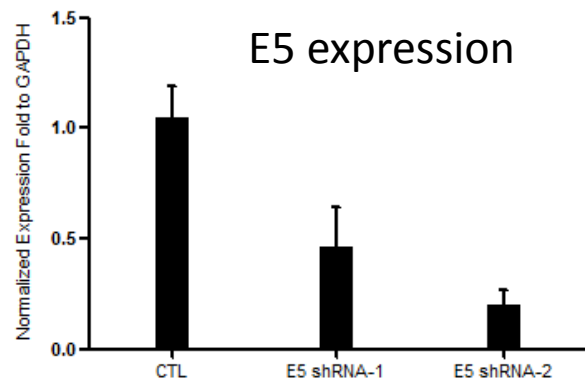


D. HOXB8 expression

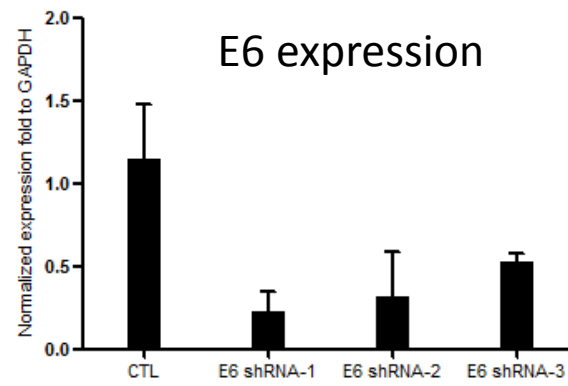


Supplementary Figure 1.

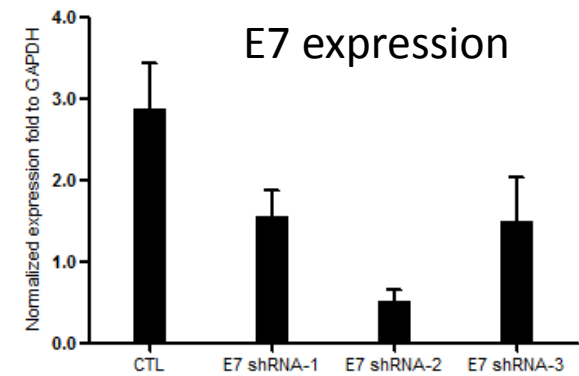
A.



B.

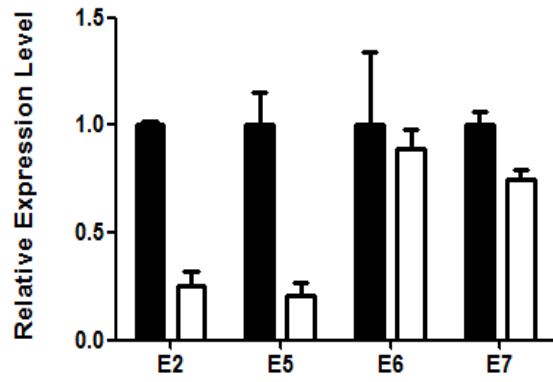


C.

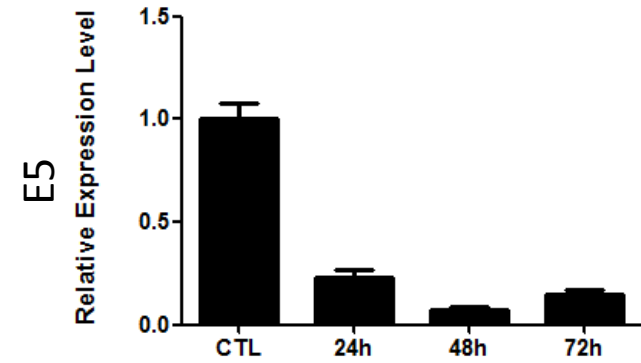


Supplementary Figure 2.

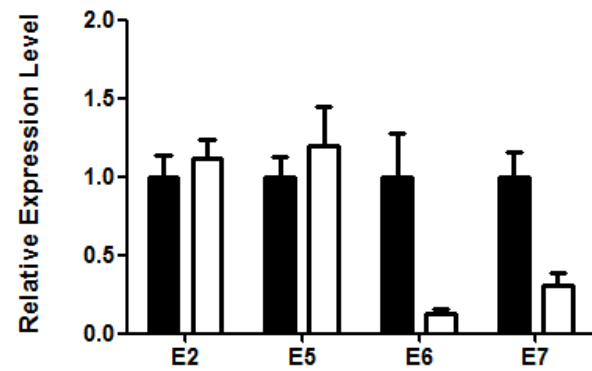
A. E5 shRNA



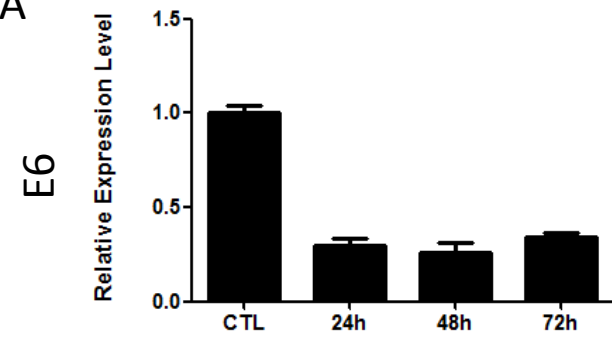
B. E5 shRNA



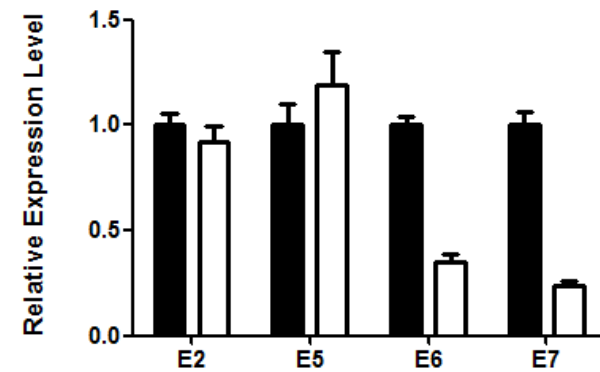
C. E6 shRNA



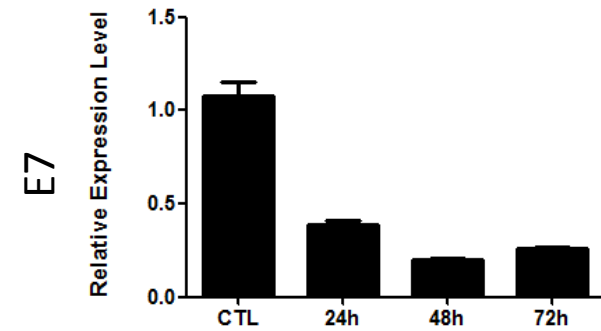
D. E6 shRNA



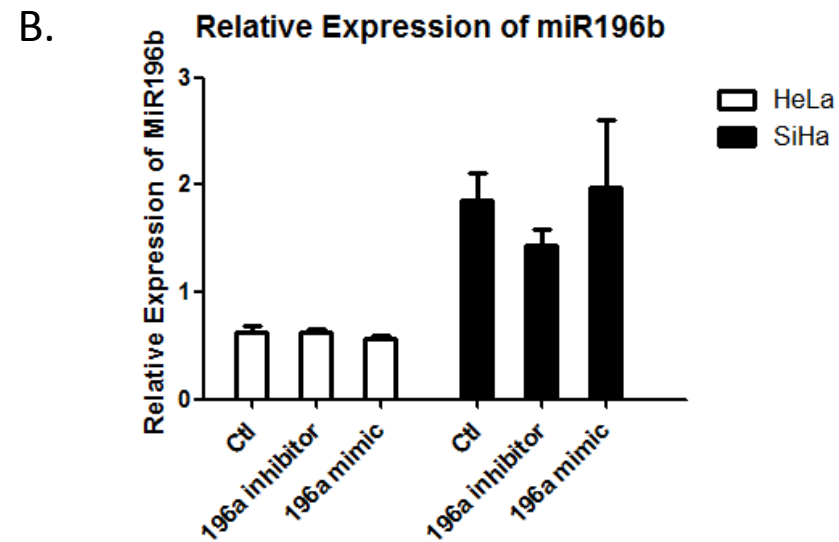
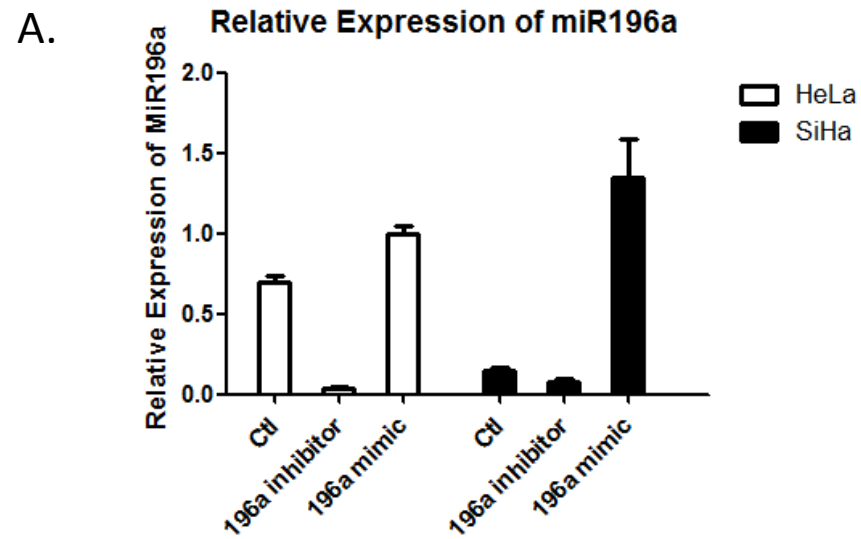
E. E7 shRNA



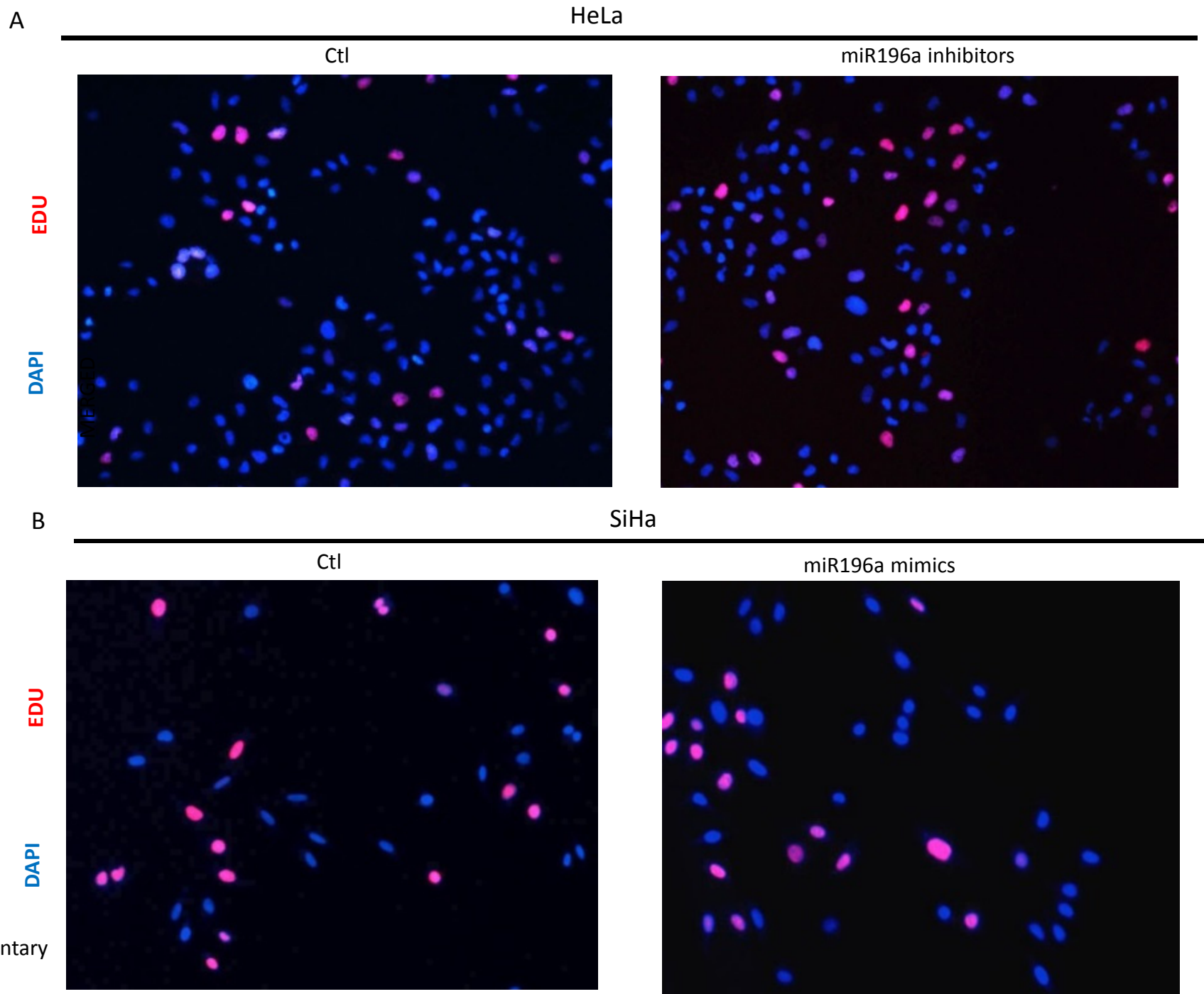
F. E7 shRNA



Supplementary Figure 3.



Supplementary Figure 4.



Supplementary  
Figure 5.

Supplementary Table 1. Primer sequences of the genes used in this study

Gene		Sequence
HPV16 E2 -qPCR	Forward	GGCCAGAGAAATGGGATTTA
	Reverse	TTAGTTGCAGTTCAATTGCTTG
HPV16 E5 -qPCR	Forward	CTTGATACTGCATCCACAACA
	Reverse	AAAAGCGTGCATGTGTATGT
HPV16 E6 -qPCR	Forward	ACTTTGCTTTTCGGGATTTATGC
	Reverse	AGGACACAGTGGCTTTTGACAGTT
HPV16 E7-qPCR	Forward	ATGCATGGAGATACACCTACATTGC
	Reverse	TTATGGTTTCTGAGAACAGATGGGG
HOXB8-qPCR	Forward	GTCCCTGCGCCCAATTATTA
	Reverse	GCCCGTGGTAGAACTCCTG
GAPDH-qPCR	Forward	CTGTCGTGTGACCACACTGGTGCC
	Reverse	ATGCTTGTCATTTTTTCATTACT
HPV16 E2-cloning	Forward	GGTACCCACCATGGAGACTCTTTGCCAACGTT
	Reverse	TCTAGATCATATAGACATAAATCCAGTA
HPV16 E5-cloning	Forward	GGTACCCACCATGACAAATCTTGATACTGCATCC
	Reverse	TCTAGATTATGTAATTA AAAAGCGTGCAT
HPV16 E6 -cloning	Forward	GGTACCCACCATGCACCAAAGAGAACTGCAATG
	Reverse	TCTAGATTACAGCTGGGTTTCTCTCGTG
HPV16 E7-cloning	Forward	GGTACCCACCATGCATGGAGATACACCTACATT
	Reverse	TCTAGATTATGGTTTCTGAGAACAGATGGG

## Supplementary Table 2. Sequences of shRNAs used in this study

Gene		Sequence
HPV16 E5	shRNA-1	CACCGATACTGCATCCACAACATTACGAATAATGTTGTGGATGCAGTATC
	shRNA-2	CACCGCCTATTAATACGTCCGCTGCCGAAGCAGCGGACGTATTAATAGGC
HPV16 E6	shRNA-1	CACCGGAGCGACCCAGAAAGTTACCCGAAGGTAACCTTCTGGGTCGCTCC
	shRNA-2	CACCGGGAATCCATATGCTGTATGTCGAAACATACAGCATATGGATTCCC
	shRNA-3	CACCGGTCGATGTATGTCTTGTTCGCCAAGCAACAAGACATACATCGACC
HPV16 E7	shRNA-1	CACCGCATGGAGATACACCTACATTCGAAAATGTAGGTGTATCTCCATGC
	shRNA-2	CACCGGACAGAGCCCATTACAATATCGAAATATTGTAATGGGCTCTGTCC
	shRNA-3	CACCGCAAGTGTGACTCTACGCTTCCGAAGAAGCGTAGAGTCACACTTGC

## Supplementary Table 3. Sequence of miR196a and miR196b

Name	Accession	sequence
hsa-miR-196a-5p	<a href="#">MIMAT0000226</a>	uagguaguuucauguuguuggg
hsa-miR-196b-5p	<a href="#">MIMAT0001080</a>	uagguaguuuuccuguuguuggg